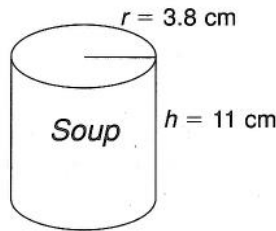


LESSON **Problem Solving**
1-6 **Order of Operations**

Write the correct answer.

1. A can of soup is in the shape of a cylinder with radius 3.8 cm and height 11 cm. What is the surface area of the can to the nearest tenth? Use 3.14 for π . (Hint: The expression $2\pi r^2 + 2\pi rh$ represents the surface area of a cylinder, where r is the radius and h is the height.)



3. In a polygon with n sides, the sum of the measures of the interior angles is $180(n - 2)^\circ$. What is the sum of the measures of the interior angles of a hexagon?

Select the best answer.

5. Anthony had 10 packages of markers. Each package contained 8 markers. He gave his 3 best friends 2 packages each. Which expression shows how many markers he kept for himself?

A $10 \cdot 8 - 10 \cdot 3 \cdot 2$ C $10 \cdot 8 - 3 \cdot 2$
B $8(10 - 3 \cdot 2)$ D $8(10 + 3 \cdot 2)$

7. Each month, Mrs. Li pays her phone company \$28 for phone service, and \$0.07 per minute for long distance calls. Which expression represents her bill for a month in which long distance calls totaled 4 hours?

A $4[28 + 60(0.07)]$ C $28 + 0.07 + 4$
B $28 + 4(60)(0.07)$ D $28 + 0.07(4)$

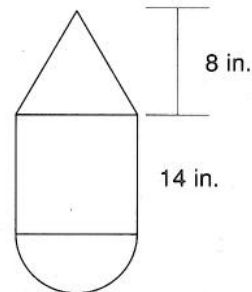
2. One Boston household used the following amounts of electricity to run its heating system during the winter.

Month	Kilowatt-Hours Used
December	1500
January	1463
February	2260

Write an expression that can be used to find the average number of kilowatt hours used. Then simplify the expression.

4. In a regular polygon with n sides, the measure of each interior angle is $\frac{180(n - 2)^\circ}{n}$. What is the measure of an interior angle of an octagon?

6. The area of the wall hanging below can be approximated by simplifying $14^2 + \frac{1}{2} \cdot 14 \cdot 8 + \frac{1}{2}(3.14)(7^2)$.



Which is closest to the area of the wall hanging?

F 160.93 sq in. H 328.93 sq in.
G 273.98 sq in. J 372.78 sq in.